

**NORMAL FIRE REHABILITATION PLAN SUPPLEMENT
FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION RECORD
BUCKHORN FIRE (X-173)
BLM/EK/PL2001/057**

Finding of No Significant Impact:

Based on the analysis of potential environmental impacts contained in Normal Fire Rehabilitation Plan Supplement Environmental Assessment BLM/EK/PL2000/057, I have determined that the proposed action will not have significant impacts on the human environment and that an Environmental Impact Statement is not required.

Decision:

It is my decision to implement the Normal Fire Rehabilitation Plan (NFRP) Supplement as described in the Environmental Assessment for them Buckhorn Fire BLM/PL2000/057. A total of 750 acres of public rangeland managed by the Bureau of Land Management Elko Field Office were burned during this fire. Approximately 200 acres of burned public land within a perimeter of 400 acres will be rehabilitated by aerial seeding with a wildlife seed mix mixture. A total of 0.8 miles of dozer line will be rehabilitated and seeded. Approximately 5 acres of existing Russian knapweed infestation within the burn area will be chemically treated. Monitoring for noxious weeds will be conducted after proposed treatments and further treatments will be applied if weeds are again detected. Post-fire management, will be determined based on monitoring and achievement of site specific resource objectives.

Rationale:

Implementation of the proposed action described in the NFRP Supplement EA for the Buckhorn Fire will protect soils in the burned area, including preventing potential loss of soil due to wind and water erosion; will reduce potential invasion and establishment of noxious weeds; will provide quality forage for wildlife.

The Elko Resource Management Plan is silent for the proposed action. The proposed action is consistent with the objectives of the RMP and is consistent with federal, state, and local laws, regulations, and plans to the maximum extent possible

Monitoring :

Post-treatment monitoring studies will be conducted to evaluate the effectiveness of the proposed treatments.

Helen Hankins
Elko Field Office

Date

**NORMAL FIRE REHABILITATION PLAN SUPPLEMENT
ENVIRONMENTAL ASSESSMENT
BUCKHORN FIRE (X-173)
BLM/EK/PL-2001/057**

Introduction:

This Supplement Environmental Assessment (EA) tiers to the Elko Field Office FY 2000 Normal Fire Rehabilitation Plan Environmental Assessment (NRFPEA) BLM/EK/PL2000/037. The Proposed Action includes NFRPEA Treatment # 2 (Planting of multiple species seed mixtures), 5 (Dozer line rehabilitation), 8 (Invasive, nonnative weed species control), and 10 (Cultural resource site stabilization and protection). The format of this Supplement EA follows the outline in the Emergency Fire Rehabilitation Handbook, BLM Manual Handbook H-1742-1 dated July 27, 1999.

List of Preparers:

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Project Area Description:

A. Fire Description:

The fire was started by a lightning strike and was reported on July 4, 2001 and was declared out on July 8, 2001. It burned 750 acres of public land. The South Buckhorn Allotment was affected by the fire. No structures burned in this fire. The 0.8 miles of constructed dozer line was on the southwest side of the fire. Burn severity was moderate on the majority of the fire.

B. Vegetation and Soil Description:

The burned area ranges in elevation from about 5200 ft in the southern and eastern portions of the fire to 6200 ft in the north to northwestern portions. No perennial streams were directly affected by the burn. The burn area is several miles from flowing water. The dominant vegetation within the burn area was Wyoming big sagebrush, rabbitbrush, Thurber's needlegrass, Sandberg

bluegrass and squirrel tail grass. The mountain ridge sites are comprised of low sagebrush, phlox and Thurber's needelgrass.

The soils on the west half of the fire are in the Bregar-Fortank-Jivas association. These soils are gravelly loam to very gravelly loam with 15-50 percent slopes. They are shallow to deep over bedrock and have medium to rapid runoff. The water erosion hazard is moderate and the wind erosion hazard is slight. The three major range sites within this association are 25-19 Loamy 8-10" p.z., 25-24 Mountain Ridge and 25-9 South Slope 12-14" p.z.

The soils on the east half of the fire are in the Valcrest-Tomera association. These soils are deep and have loamy and gravelly fine sandy loam textures. They occur on slopes ranging from 2 to 8 percent. They have slow runoff and the wind and water erosion hazards are slight. The major range site associated with these soils is 25-19 Loamy 8-10" p.z.

Proposed Project Treatments:

A. Revegetation:

1. Wildlife aerial seeding

Approximately 200 acres of Wyoming big sagebrush, Western yarrow and forage kochia would be seeded in a 400-acre perimeter. Every other swath would be seeded within this 400-acre block. The area to be seeded would be on the steeper east and south east facing slopes on the west side of the fire. The proposed kochia and Western yarrow seeding would also help slow the establishment of cheatgrass while providing forage for wildlife.

2. Rangeland aerial seeding:

A total of 0.8 mile of dozer line would be seeded with Intermediate wheatgrass and Nordan crested wheatgrass. Seed would be applied with a broadcast seeder on back of a four wheeler directly after the dozer lines are rehabilitated. If possible a harrow drag would be used to help cover the seed.

3. Invasive, nonnative weed control:

Approximately five acres of Russian knapweed within the burn area would be treated with herbicides. In addition, hoary cress may occur in the burn area along the County Road. If hoary cress is detected in the burn area, it would also be treated. If noxious weeds are detected after fire rehabilitation treatments, appropriate Integrated Pest Management (IPM) control measures would be implemented to control the invasion.

Consideration of Critical Elements and Resources:

The following critical elements of the human environment are not present or are not affected by the proposed action or alternative:

- ACECs
- Environmental Justice
- Farmlands, prime or unique
- Floodplains
- Wastes, hazardous/solid
- Wetlands/Riparian Zones
- Wild and Scenic Rivers
- Wilderness

Critical elements and resources brought forward for analysis:

A. Air Quality:

The burned area is highly susceptible to wind erosion until revegetation occurs. Wind erosion can increase Particulate Matter #10 (PM#10) emissions causing exceedence of PM #10 air quality standards which can negatively affect human health. In addition, airborne dust can cause visibility and safety problems on roads in the area. The proposed vegetation treatments would encourage accelerated regrowth of vegetation, thus reducing future potential air quality impacts.

B. Cultural Resources:

The Buckhorn Fire occurred within an area known to archaeologists as the Central Great Basin which has been inhabited by humans for approximately 12,000 years. Archaeological sites and cultural properties in this area must be afforded protection whenever possible. Section 106 of the Natural Historic Preservation Act mandates that the federal government will account for cultural resources in its projects and undertakings, including fire rehabilitation efforts. Ground disturbing activities such as drill seeding, dozer line rehabilitation, fence construction, and road repair could damage cultural sites. Therefore, areas designated for mechanized seeding and other ground disturbance would be inventoried for cultural resources before the disturbance occurs in accordance with the State Protocol Agreement Between BLM, Nevada and the Nevada State Office of Historic Preservation (SHPO). At a minimum, to reduce potential impacts to cultural resources, activities that involve mechanized surface disturbance of less than 10 cm depth would generally have transect spacing of 100 meters. More intense inventory would be used for highly sensitive areas. If surface disturbance is greater than 10 cm, then 30 meter transect intervals would be used.

All cultural resources discovered or relocated will be plotted on maps and at a minimum would be recorded on the Nevada IMACS short form. Resources except those previously determined not eligible, by BLM and SHPO, or that have been fully mitigated, would be flagged for avoidance and avoided during rehabilitation activities. Flagging would be placed to minimize the

potential for looting and vandalism and removed as soon as possible.

C. Migratory Birds:

The proposed restorative actions are located in a sagebrush habitat type. The Nevada Partners in Flight Bird Conservation Plan identifies the following bird species associated with this physiographic region: sage grouse (obligate), black rosy finch, ferruginous hawk, gray flycatcher, loggerhead shrike, vesper sparrow, prairie falcon, sage sparrow, sage thrasher, Swainson's hawk, burrowing owl, calliope hummingbird, Brewer's sparrow, Western meadowlark, black-throated sparrow, lark sparrow, green-tailed towhee, Brewer's blackbird, horned lark, and lark sparrow.

Maintaining complete, diverse sagebrush communities is integral to conservation efforts for these species. The Wyoming big sagebrush vegetation type generally does not naturally respond well to block burn configurations, such as the Buckhorn burn, where only relatively small intact stands still exist. Wyoming big sagebrush seed banks (viable residual seed on the ground) usually do not persist after the summer following seed dispersal in unburned areas, let alone burned areas. Recruitment would be slow from intact stands and surrounding unburned stands without rehabilitation. The proposed action to seed the area with Wyoming big sagebrush, Western yarrow and forage kochia would help to provide wildlife cover and forage. In addition, seeding forage kochia and Western yarrow would also help slow the establishment of cheatgrass within the burn area. This should provide beneficial impacts to these species and is consistent with the conservation measures listed in Section 3(e) of the President's Migratory Bird Executive Order.

D. Invasive, Nonnative Species:

Russian knapweed can be found on public land in the burn area primarily adjacent to the County Road. Fire suppression efforts, including dozer line construction and use of engines and other mechanized vehicles, is likely to have introduced knapweed seeds further into the burned area. The burn area also has a small component of cheatgrass in the understory. In addition, hoary cress may be in the burn area along the County Road. In order to reduce the potential impacts of an invasion of noxious weeds, monitoring must be conducted after rehabilitation treatments are completed. Since noxious weeds were discovered to have invaded the burn area, herbicide treatments would need to be implemented to reduce the spread of the noxious weeds. The proposed monitoring and noxious weed treatment would help to contain the current infestation of noxious weeds and help stop the spread of noxious weeds further into Buckhorn burn.

E. Native American Religious Concerns:

Native Americans would be consulted as appropriate prior to any ground disturbing activities or herbicide treatments. If traditional cultural properties or other areas having traditional or religious significance to Native Americans are discovered as a result of this consultation, then BLM would insure that measures are taken to avoid or reduce impacts to these areas of concern to Native

Americans.

F. Threatened, Endangered, Candidate, or Sensitive Species:

The area provides habitat for golden eagle, burrowing owls, Swainson's hawks and ferruginous hawks, which are State of Nevada Listed Species. The area also provides summer/early brood-rearing habitat for sage grouse, a BLM Sensitive Species. Nevada BLM policy is to provide State of Nevada Listed and BLM Sensitive Species with the same level of protection as is provided for candidate species to prevent further listings as threatened or endangered. The proposed action would not likely affect any other BLM Special Status Species of plants or animals.

Although the suspected causes of sage grouse decline are numerous, loss of habitat, including loss by fire, ranks at the top of the list. Rehabilitation of sage grouse habitat, and the prevention of invasion by fire prone annual weeds such as cheatgrass, is a wildlife priority of both BLM and the Nevada Division of Wildlife. The proposed seeding treatment is designed to help restore sagebrush habitat and/or reduce the impacts from the invasion or re-invasion of fire prone annual weeds. The seeding of Wyoming big sagebrush would help ensure that this species is available as a future seed source, and as cover and forage, in the event that natural recovery is slow. Sage grouse would be able to more fully utilize the burn area with big sagebrush cover. Otherwise, many areas on the burn would likely be avoided until shrubs naturally reestablish.

G. Visual Resources:

The burned area is within Visual Resource Management Class IV and changes in this class should be subordinate to the existing landscape. Both the fire itself and fire suppression activities such as creation of dozer lines, have resulted in visual impacts to the area. Revegetation efforts are designed to blend into the background without attracting undue attention and aid in restoring the area to a more characteristic landscape. The proposed seedings would reduce adverse visual impacts by accelerating regrowth of vegetation.

H. Water Quality, surface/ground:

The burned watersheds will be subject to increased flooding and erosion due to the lack of vegetative cover. There is moderate hazard of water erosion on the west side of the burn which is also the steeper part of the area. The east half of the fire has a slight wind and water erosion hazard. The proposed aerial seedings would help accelerate revegetation and reduce potential adverse impacts from wind and water erosion.

I. Wildlife:

The Buckhorn Fire occurred in pronghorn antelope and mule deer winter range. The Buckhorn fire area is approximately 5 miles north east of the 2000 Beowawe Fire which burned 13,900 acres of mule deer and pronghorn antelope winter range. Overall, there are approximately 100

bird species, 70 mammal species and several reptile and amphibian species that can be found in sagebrush habitats on the allotment. The area provides habitat for many of these species. Wildlife was adversely impacted by the Buckhorn Fire primarily through temporary loss of habitat through removal of vegetation by the fire. The proposed rehabilitation wildlife seeding would benefit wildlife by ensuring that a shrub component remains burned area to provide forage and cover for wildlife.

Project Cost Summary: (the cost summary information can be found in the Burned Area Emergency Rehabilitation (BAER) Plan and Accomplishment Report for the Elko 14 Fire Complex)

Project Maps: (project maps can be found in the Burned Area Emergency Rehabilitation (BAER) Plan and Accomplishment Report for the Elko 14 Fire Complex)

Cost/Risk Assessment: (the cost/risk assessment can be found in the Burned Area Emergency Rehabilitation (BAER) Plan and Accomplishment Report for the Elko 14 Fire Complex)

Native/Nonnative Worksheet: (the native/nonnative worksheet can be found in the Burned Area Emergency Rehabilitation (BAER) Plan and Accomplishment Report for the Elko 14 Fire Complex)